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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,158	03/06/2001	Kenneth A. Parulski	74892P/MSS	3611

7590 11/02/2005

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EXAMINER	
JELINEK, BRIAN J	

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/800,158	PARULSKI ET AL.	
	Examiner	Art Unit	
	Brian Jelinek	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2005 and 04 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

The Examiner respectfully submits a response to the amendment received on 7/5/2005 of application no. 09/800,158 filed on 3/6/2001 in which claims 1-14 are currently pending.

Arguments

The Applicant has presented a declaration of prior invention along with evidence showing completion of the invention prior to the effective date of the Ogawa et al. reference, coupled with diligence from a time just prior to the date of the reference continuously up to the date of filing of the parent application.

In response, in determining priority of invention, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other. Conception has been defined as "the complete performance of the mental part of the inventive act" and in establishing conception a party must show possession of every feature recited, and that every limitation must have been known to the inventor at the time of the alleged conception MPEP § 2138.04. Furthermore, the entire period during which diligence is required must be accounted for by either affirmative acts or acceptable excuses. A 2-day period lacking activity has been held to be fatal MPEP § 2138.06.

The Applicant has failed to show conception, alleged to have occurred on August 13, 1996, because possession has not been shown of every feature recited. In particular, the document of August 13, 1996 fails to disclose at least an image processor adapted to perform first processing and compression to create a first processed image file, selecting an image from memory, and performing second processing on the selected digital image file before applying the image to the interface.

Further, the Applicant clearly has failed to show diligence. The critical period for diligence is from just prior to the date of the Ogawa reference, 1/30/1997, to the Applicant's reduction to practice of the invention in the form of an application for patent on 4/4/1997. The Examiner notes that for the entire period in question, the only date on which the Applicant took any action was on March 17, 1997. As a 2-day period lacking activity has been held to be fatal, it is clear that the evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 11, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa et al. (U.S. Pat. Appl. No. 2002/0080250).

Regarding claim 1, Ogawa et al. teaches a digital camera (Fig. 1, element 10a; para 57, lines 1-4) for use with a separate color printer (Fig. 1, element 11) having predetermined characteristics, said camera comprising: a housing because a housing is inherent in a digital camera; an image sensor adapted to capture analog image data (Fig. 1, element 10a; para 57, lines 1-4); an analog-to-digital converter adapted to convert the analog image data captured by the image sensor to digital image data (para 39); an image processor adapted to perform first processing and compression of the digital image data to create a first-processed digital image file (para 39); digital memory in the camera housing, a plurality of first-processed digital image files from the image processor being stored in the removable digital memory (Fig. 1, element 10L; para 84); and an interface (Fig. 1, element 10k) to the separate color printer to which a digital image file, which is selected (para 66) from the digital memory, is applied, wherein the image processor is adapted to perform second processing (Fig. 3, elements s30j and s30o; para 60-61) on the selected digital image file before the selected digital image file is applied to the interface.

Regarding claim 11, Ogawa et al. teaches the housing includes a color image display (Fig. 1, element 10i; para 36) for providing user-observable images of first-processed digital image files stored in the removable digital memory; and user controls coupled to the processor for selecting a digital image file to be second processed by said image processor (para 65 and 66).

Regarding claim 14, Ogawa et al. teaches a digital camera (Fig. 1, element 10a; para 57, lines 1-4) for use with a separate color printer (Fig. 1, element 11) having

predetermined characteristics, said camera comprising: a housing because a housing is inherent in a digital camera; an image sensor adapted to capture analog image data (Fig. 1, element 10a; para 57, lines 1-4); an analog-to-digital converter adapted to convert the analog image data captured by the image sensor to digital image data (para 39); an image processor adapted to perform first processing and compression of the digital image data to create a first-processed digital image file (para 39); digital memory removably mounted in the camera housing, a plurality of first-processed digital image files from the image processor being stored in the removable digital memory (Fig. 1, element 10L; para 84); and an interface (Fig. 1, element 10k) to the separate color printer to which a digital image file, which is user-selected (para 66) from the digital memory, is applied, wherein the image processor is adapted to perform second processing (Fig. 3, elements s30j and s30o; para 60-61) on the user-selected digital image file before the user-selected digital image file is applied to the interface.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (U.S. Pat. Appl. No. 2002/0080250) in view of Ebner (U.S. Pat. No. 5,689,344).

Regarding claim 2, Ogawa et al. teaches that the printer type is determined, processing corresponding to the printer type is performed (para 50), and image data is converted into print codes that the printer can interpret (para 60; para 86 and 89, page description language). In other words, Ogawa et al., as a whole, teaches the camera determines the printer that is connected and converts image data into a format that is specific to the particular printer (Fig. 3, element S31b). Ogawa et al. does not teach an image file is converted to multi-tone values during second processing.

However, Ebner teaches a color correction process (Fig. 1, elements 10 and 12) in which page description language files are decomposed into a plurality of CMYK separations before being sent to a half-toner (Fig. 1, element 12) in preparation for printing. One of ordinary skill in the art would have converted an image file into multi-tone values using the half-toner in order to reduce the number of gray values of an image, typically 256, into two values suitable for printing (col. 4, lines 43-51). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have converted an image file into multi-tone values using the half-toner in order to reduce the number of gray values of an image, typically 256, into two values suitable for printing (col. 4, lines 43-51).

Regarding claim 3, Ogawa et al. teaches the printer type is determined over the interface (Fig. 1, element 10k) and processing corresponding to the printer type is performed (para 50). Ogawa et al. does not teach the multi-tone values are determined using a predetermined number of density levels. However, Ebner teaches that the rendition of color is unique to a particular printer; consequently, it is necessary to

decompose color defined in device independent terms into printer specific signals comprising half-tone values (col. 4, lines 16-42). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide in Ogawa et al. the capability to decompose color defined in device independent terms into printer specific signals comprising half-tone values for the purpose of producing printer specific signals for the printer which has been determined to be connected in Ogawa et al.

Ebner further teaches the multi-tone values are determined using a predetermined number of density levels; although multilevel printers beyond binary are known (col. 1, lines 31-34), the typical number of density levels is two (col. 4, lines 43-51).

Regarding claim 4, Ebner further teaches the multi-tone values are determined using a predetermined density for each of the density levels (col. 5, lines 13-15).

Regarding claim 5, Ogawa et al. teaches the color records of the selected digital image file are processed during second processing (please see the 102 rejection of claim 1). Ogawa et al. does not teach that second processing further includes ink limiting. However, Ebner teaches that the rendition of color is unique to a particular printer; consequently, it is necessary to decompose color defined in device independent terms into printer specific signals comprising half-tone values (col. 4, lines 16-42) before performing ink reduction (col. 5, lines 43-50). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided in Ogawa et al. the capability to decompose color defined in device independent terms into printer specific signals comprising half-tone values before performing ink reduction for the

purpose of producing printer specific signals for the printer which has been determined to be connected in Ogawa et al.

Ebner further teaches that color records of a digital image file may be processed to provide ink limiting (col. 6, lines 1-6). One of ordinary skill in the art would have provided ink limiting for the purpose of reducing the amount of colorant used in reproduction (col. 5, lines 43-45). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided ink limiting for the purpose of reducing the amount of colorant used in reproduction.

Regarding claim 6, Ebner does not teach that ink limiting is effected using type of printer, ink, and receiver media information provided by the separate color printer over the interface.

However, Official Notice is given that it is well known in the art to optimize ink limiting using the type of printer, ink, and receiver media because the type of printer, ink, and receiver media determine the minimum amount of ink necessary for adequate coverage. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to optimize ink limiting using the type of printer, ink, and receiver media because the type of printer, ink, and receiver media determine the minimum amount of ink necessary for adequate coverage.

Regarding claim 7, Ogawa et al. teaches that color records of the selected digital image file (para 66) are decoded and converted during second processing (para 56) into a page description language (para 60; para 86, page description language). Ogawa et al. does not teach the separate color printer uses four ink colors; and the color records

of the selected digital image file are converted to three image planes and are color corrected during second processing to provide a set of color planes corresponding to each ink color of the separate color printer.

However, Ebner teaches the separate color printer uses four ink colors (col. 1, lines 23-30). One of ordinary skill in the art would have provided a color printer that comprises four ink colors in order to provide the primary subtractive colors (col. 1, lines 23-26). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a color printer that comprises four ink colors in order to provide the primary subtractive colors. Furthermore, Ebner teaches decomposing a page description language file (Fig. 1, element 10) into CMYK values. Ebner does not teach generating three image planes when decomposing the page description file.

Official Notice is given that it is well known in the art to transform a drawing color (e.g., a color defined in RGB space) specified by the drawing data described in a PDL into a color that can be used by a printer engine (e.g., a color defined in the YMCK space). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to transform a drawing color (e.g., a color defined in RGB space) specified by the drawing data described in a PDL into a color that can be used by a printer engine (e.g., a color defined in the YMCK space) because printers require YMCK values for printing.

Furthermore, Ebner teaches color correction of the page description file to provide a set of color planes corresponding to each ink color of the separate color

printer (col. 4, lines 36-40). One of ordinary skill in the art would have provided color correction of the RGB color values in the page description language file in order to provide a set of signals to drive the printer to reproduce an image as a superposition of multiple separations (col. 4, lines 7-15). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided color correction of the RGB color values in the page description language file in order to provide a set of signals to drive the printer to reproduce an image as a superposition of multiple separations.

Regarding claim 8, Ebner teaches the set of color planes corresponding to each ink color of the separate color printer include at least four colors (please see the 103 rejection of claim 7).

Regarding claim 9, please see the 103 rejection of claim 7. Official Notice is given that it is well known in the art to provide ink colors including light cyan, dark cyan, light magenta, dark magenta, yellow, and black for CMYK. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide light cyan, dark cyan, light magenta, dark magenta, yellow, and black for CMYK because it is possible to reproduce colors more accurately.

Regarding claim 10, Ogawa et al. teaches that the printer type is determined, processing corresponding to the printer type is performed (para 50), and image data is converted into print codes that the printer can interpret (para 60; para 86 and 89, page description language). In other words, Ogawa et al., as a whole, teaches the camera

determines the printer that is connected and converts image data into a format that is specific to the particular printer (Fig. 3, element S31b).

Ogawa et al. does not teach the separate color printer uses four ink colors; and the color records of the selected digital image file are converted to three image planes. Furthermore, Ogawa et al. does not teach sequentially during second processing: the three image planes are color corrected to provide a set of color planes corresponding to each ink color of the separate color printer, color records of the selected digital image file are processed to provide ink limiting, and the color records of the selected digital image file are converted to multi-tone values.

However, Ebner teaches the separate color printer uses four ink colors (col. 1, lines 23-30). One of ordinary skill in the art would have provided a color printer that comprises four ink colors in order to provide the primary subtractive colors (col. 1, lines 23-26). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a color printer that comprises four ink colors in order to provide the primary subtractive colors. Furthermore, Ebner teaches decomposing a page description language file (Fig. 1, element 10) into CMYK values. Ebner does not teach generating three image planes when decomposing the page description file.

Official Notice is given that it is well known in the art to transform a drawing color (e.g., a color defined in RGB space) specified by the drawing data described in a PDL into a color that can be used by a printer engine (e.g., a color defined in the YMCK space). Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to transform a drawing color (e.g., a color defined in RGB space) specified by the drawing data described in a PDL into a color that can be used by a printer engine (e.g., a color defined in the YMCK space) because printers require YMCK values for printing.

Furthermore, Ebner teaches color correction of the page description file to provide a set of color planes corresponding to each ink color of the separate color printer (col. 4, lines 36-40). One of ordinary skill in the art would have provided color correction of the RGB color values in the page description language file in order to provide a set of signals to drive the printer to reproduce an image as a superposition of multiple separations (col. 4, lines 7-15). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided color correction of the RGB color values in the page description language file in order to provide a set of signals to drive the printer to reproduce an image as a superposition of multiple separations.

Although Ogawa et al. does not teach that second processing further includes ink limiting, Ebner teaches that the rendition of color is unique to a particular printer; consequently, it is necessary to decompose color defined in device independent terms into printer specific signals comprising half-tone values (col. 4, lines 16-42) before performing ink reduction (col. 5, lines 43-50). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide in Ogawa et al. the capability to decompose color defined in device independent terms into printer specific signals comprising half-tone values before performing ink reduction for the purpose of

producing printer specific signals for the printer which has been determined to be connected in Ogawa et al.

Ebner further teaches that color records of a digital image file may be processed to provide ink limiting (col. 6, lines 1-6). One of ordinary skill in the art would have provided ink limiting for the purpose of reducing the amount of colorant used in reproduction (col. 5, lines 43-45). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided ink limiting for the purpose of reducing the amount of colorant used in reproduction.

Ebner further teaches in the color correction process (Fig. 1, elements 10 and 12) the page description language files are decomposed into a plurality of CMYK separations before being sent to a half-toner (Fig. 1, element 12) in preparation for printing. One of ordinary skill in the art would have converted an image file into multi-tone values using the half-toner in order to reduce the number of gray values of an image, typically 256, into two values suitable for printing (col. 4, lines 43-51). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have converted an image file into multi-tone values using the half-toner in order to reduce the number of gray values of an image, typically 256, into two values suitable for printing (col. 4, lines 43-51).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (U.S. Pat. Appl. No. 2002/0080250), in view of Vogel (U.S. Pat. No. 5,668,596).

Regarding claim 12, Ogawa et al. teaches first processing (para 39) includes: image compression (para 39); and the second processing includes decompression (para 56 and 60) of the selected digital image file before the selected digital image file is applied to the interface.

Ogawa et al. does not teach during first processing: interpolation to provide red, green and blue image data values to provide red, green, and blue color planes; and color correction of the red, green, and blue color planes.

However, Vogel teaches does teach interpolation to provide red, green and blue image data values to provide red, green, and blue color planes (Fig. 4, element 34; col. 5, lines 51-61); and color correction of the red, green, and blue color planes (Fig. 4, element 40; col. 5, line 56-61). One of ordinary skill in the art would have provided interpolation to provide red, green and blue image data values to provide red, green, and blue color planes (col. 5, lines 60-61). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided interpolation to provide red, green and blue image data values to provide red, green, and blue color planes. One of ordinary skill in the art would have provided color correction of the red, green, and blue color planes in order to correct for spectral sensitivities of the particular CCD imager and optics in the camera and for the type of output device used (col. 6, lines 23-27). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have performed color correction in order to correct for spectral sensitivities of the particular CCD imager and optics in the camera and for the type of output device used.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (U.S. Pat. Appl. No. 2002/0080250), in view of Vogel (U.S. Pat. No. 5,668,596), in further view of Ebner (U.S. Pat. No. 5,689,344).

Regarding claim 13, please see the rejection of claim 12. Ogawa et al. further teaches that the printer type is determined, processing corresponding to the printer type is performed (para 50), and image data is converted into print codes that the printer can interpret (para 60; para 86 and 89, page description language). In other words, Ogawa et al., as a whole, teaches the camera determines the printer that is connected and converts image data into a format that is specific to the particular printer (Fig. 3, element S31b). Furthermore, Ogawa et al. teaches that color records of the selected digital image file (para 66) are decoded (decompressed) and converted during second processing (para 56) into the page description language (para 60; para 86, page description language).

Ogawa et al. does not teach the separate color printer uses four ink colors; and the color records of the selected digital image file are converted to three image planes. Furthermore, Ogawa et al. does not teach sequentially during second processing: the three image planes are color corrected to provide a set of color planes corresponding to each ink color of the separate color printer, color records of the selected digital image file are processed to provide ink limiting, and the color records of the selected digital image file are converted to multi-tone values.

However, Ebner teaches the separate color printer uses four ink colors (col. 1,

lines 23-30). One of ordinary skill in the art would have provided a color printer that comprises four ink colors in order to provide the primary subtractive colors (col. 1, lines 23-26). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a color printer that comprises four ink colors in order to provide the primary subtractive colors. Furthermore, Ebner teaches decomposing a page description language file (Fig. 1, element 10) into CMYK values. Ebner does not teach generating three image planes when decomposing the page description file.

Official Notice is given that it is well known in the art to transform a drawing color (e.g., a color defined in RGB space) specified by the drawing data described in a PDL into a color that can be used by a printer engine (e.g., a color defined in the YMCK space). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to transform a drawing color (e.g., a color defined in RGB space) specified by the drawing data described in a PDL into a color that can be used by a printer engine (e.g., a color defined in the YMCK space) because printers require YMCK values for printing.

Furthermore, Ebner teaches color correction of the page description file to provide a set of color planes corresponding to each ink color of the separate color printer (col. 4, lines 36-40). One of ordinary skill in the art would have provided color correction of the RGB color values in the page description language file in order to provide a set of signals to drive the printer to reproduce an image as a superposition of multiple separations (col. 4, lines 7-15). As a result, it would have been obvious to one

of ordinary skill in the art at the time of the invention to have provided color correction of the RGB color values in the page description language file in order to provide a set of signals to drive the printer to reproduce an image as a superposition of multiple separations.

Although Ogawa et al. does not teach that second processing further includes ink limiting, Ebner teaches that the rendition of color is unique to a particular printer; consequently, it is necessary to decompose color defined in device independent terms into printer specific signals comprising half-tone values (col. 4, lines 16-42) before performing ink reduction (col. 5, lines 43-50). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide in Ogawa et al. the capability to decompose color defined in device independent terms into printer specific signals comprising half-tone values before performing ink reduction for the purpose of producing printer specific signals for the printer which has been determined to be connected in Ogawa et al.

Ebner further teaches that color records of a digital image file may be processed to provide ink limiting (col. 6, lines 1-6). One of ordinary skill in the art would have provided ink limiting for the purpose of reducing the amount of colorant used in reproduction (col. 5, lines 43-45). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided ink limiting for the purpose of reducing the amount of colorant used in reproduction.

Ebner further teaches in the color correction process (Fig. 1, elements 10 and 12) the page description language files are decomposed into a plurality of CMYK separations

before being sent to a half-toner (Fig. 1, element 12) in preparation for printing. One of ordinary skill in the art would have converted an image file into multi-tone values using the half-toner in order to reduce the number of gray values of an image, typically 256, into two values suitable for printing (col. 4, lines 43-51). As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have converted an image file into multi-tone values using the half-toner in order to reduce the number of gray values of an image, typically 256, into two values suitable for printing (col. 4, lines 43-51).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Jelinek whose telephone number is (571) 272-7366. The examiner can normally be reached on M-F 9:00 am - 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached at (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Jelinek
10/21/2005

DAVID L. OMETZ
SUPERVISORY PATENT
EXAMINER